Ministry of Health
Ontario

Health Research Grants and Awards 1986-87

PREFACE

This brochure describes the extramural research programs of the Ministry of Health. Information regarding the general purpose and areas of support for each program is given in broad terms, and details are provided regarding financial and other administrative requirements. This brochure is distributed annually to the research offices of Ontario universities, District Health Councils, Public Health Units, and the Ontario Government Bookstore. Individual brochures are also available on request from the Ministry.

Applicants are encouraged to seek information on special problems or areas of doubt by contacting the Ministry. All applications, requests and inquiries are to be directed to:

Supervisor, Grants Administration
Policy Analysis and Research Branch
Ministry of Health
Hepburn Block, 8th Floor
Queen's Park
Toronto, Ontario
M7A 1R3

Telephone (416) 965-5887

SUMMARY OF PROGRAMS

AREA OF SUPPORT	PROGRAM	SUBPROGRAM	SUBMISSION DATE
RESEARCH PROJECTS	HEALTH CARE SYSTEMS RESEARCH	RESEARCH	NOV 1 APR 1
		FEASIBILITY	ANY TIME
	PUBLIC HEALTH RESEARCH AND DEVELOPMENT	RESEARCH	NOV 1 APR 1
		FORMULATION	ANY TIME
		INFORMATION	NOV 1 APR 1
		CONFERENCES AND WORKSHOPS	ANY TIME
RESEARCH PERSONNEL	HEALTH RESEARCH PERSONNEL DEVELOPMENT	STUDENT AWARD	JAN 15
		FELLOWSHIP	NOV 15
		CAREER SCIENTIST	NOV 15

EARLIEST FUNDING DATE	FIRST APPROVAL	RENEWAL	LIMIT
APR 1 SEP 1	UP TO 2 FISCAL YEARS	ANNUAL	NONE
6 WEEKS AFTER RECEIPT	UP TO 9 MONTHS	NONE	13,000
APR 1 SEP 1	UP TO 2 FISCAL YEARS	ANNUAL	NONE
6 WEEKS AFTER RECEIPT	UP TO 9 MONTHS	NONE	13,000
APR 1 SEP 1	UP TO 12 MONTHS	NONE	13,000
6 WEEKS AFTER RECEIPT	UP TO 1 YEAR	NONE	5,000
JULY 1	MASTERS - 2 YEARS Ph.D. - 4 YEARS	NONE	
JULY 1	UP TO 2 YEARS	ONCE, UP TO 1 YEAR	
JULY 1	5 YEARS	ONCE, UP TO 5 YEARS	

CONTENTS

Preface iii
Summary of Programs iv

Research Grants Description 1
Introduction 1
Research Interests 1
General Conditions 2
Health Care Systems Research 4
Definition 4
Research 4
Feasibility 4

Public Health Research and Development 5
Definition 5
Research 5
Formulation 6
Information Studies 6
Workshops/Conferences 7
Health Care Research Units 8
Heart, Cancer, Addiction and Mental Health Research 9

Research Grants Administration 10
Source 10
Sponsor 10
Deadlines 10
Preparation for Application 10
The Application 11
Continuations 15
Renewals 15
Information Studies 16
Feasibility and Formulation grants 16
Workshops/Conferences 16
Review Process 17
Notification of Awards 18
Amendments 18
Method of Payment and Claims 18
Final Reports 19
Publications 20

Research Awards Description 21
Health Research Personnel Development 21
Student Award 22
Purpose 22
Eligibility Requirements 22
The Application 22
Review Criteria & Process 24
Amount and Duration of Support 24
Reports 24

Fellowship 25
Purpose 25
Eligibility Requirements 25
The Application 25
Review Criteria & Process 27
Amount and Duration of Support 28
Reports 28
Renewal Application 28
Publications 28

Career Scientist 29
Purpose 29
Eligibility Requirements 29
The Application 29
Review Criteria & Process 31
Amount and Duration of Support 31
Reports 32
Renewal Application 32
Publications 32

Research Awards Administration 33
Deadline 33
Notification of Awards 33
Method of Payment and Claims 33
Amendments 34

Appendix A - Criteria for assessment of applications 35
Appendix B - Sample budget 37
Appendix C - Guide for evaluation of final reports 39

Research Grants

RESEARCH GRANTS DESCRIPTION

INTRODUCTION

The Ministry has two extramural unsolicited research grant programs, the Health Care Systems Research Program, and the Public Health Research and Development Program. Through these programs, the Ministry supports studies which evaluate aspects of Ontario's health care system, with a view to improving its cost-effectiveness, availability, accessibility, and acceptance.

RESEARCH INTERESTS

The Ministry has an ongoing particular interest in evaluative studies in the following areas.

Health Services Patterns

In order to plan for and implement changes in the system for delivering health care, there is a need to determine the "need" and "want" components of demand for health services; assess whether the existing type and structure of resources are optimal in meeting current needs; and estimate future needs, and the adjustments to the system that will be required.

Investigations into the factors influencing the use of services are of interest, and include:

- utilization of medical services, including diagnostic and therapeutic techniques, and services provided by other health professionals;
- mode of payment, and the service environment;
- patient need and demand, including demographics, epidemiological trends, environmental impact, and socio-economic influences; and
- health manpower, including medical school output, training for physicians and other health professionals, and allied and substitute health personnel.

Community and Public Health

Evaluative studies are needed to measure the effectiveness and increase the efficiency of mandatory public health programs, including family health, communicable disease control, community sanitation, preventive dentistry, nutrition, home care and health education. Also of interest are studies of the organization and delivery of cost-effective health care at the community level, to prevent disease and maintain the health and functional independence of individuals, and to identify and bring to care those in need.

Health Promotion

Studies are of interest which lead to the development of programs proven to be effective for alcohol moderation, smoking cessation, improved physical fitness and good nutrition, and increased awareness of personal responsibility for health.

Women's Health

Studies are needed to enhance an understanding of the effects resulting from changing demographic patterns on programs, for example, the increasing age of child bearing. Also of interest are evaluative studies of services for the prevention, detection, diagnosis and treatment of female-specific diseases, such as breast cancer, pelvic inflammatory disease and osteoporosis.

Health Care for the Elderly

Of particular interest are evaluative studies of health care services and programs for the elderly, to maintain good health and independent living, to delay the onset of chronic diseases, and to improve quality of life in institutions.

Technology

Scientific investigation of new technologies is needed regarding their appropriate clinical application, and to provide the basis for distribution and rational use in the health care system. New technologies are to be compared to existing technologies on the basis of cost-effectiveness, and ability to provide improved diagnostic outcomes, and diagnostic outcomes that were otherwise not available.

AIDS

Studies of the epidemiology, diagnosis and treatment of AIDS are of interest. Epidemiology studies are required to define the natural history and risk factors of the syndrome. Screening tests need to be developed to identify AIDS in its early stages. Potential treatments for AIDS require evaluation.

GENERAL CONDITIONS

Through the research grants programs, funds are granted to cover the direct operating costs of acceptable health care research projects based in Ontario.

Support is given for evaluative studies, and may also be given for developmental work that forms an integral part of an evaluative study ie. plans are included for application of the developmental work in an adequate clinical or epidemiological evaluation.

These grants are not intended to provide supplementary or interim funding for projects supported by other agencies. However, proposals may be submitted simultaneously to several interested agencies. The review of the proposal may then be co-ordinated and, if successful, shared or joint funding undertaken at the discretion of the individual agencies.

Support is not provided by the programs for basic research, major equipment acquisitions, educational programs or the provision of services which should be financed from service support programs.

Consideration can be given to some service funding when the research is related to a new and innovative health service, or when the service cost is increased during the course of the research, and offset savings cannot be identified by the sponsoring agency. No service funding can be provided beyond the termination date of the research project. Once the value of a service is established, implementation of a service program is the responsibility of the investigator and the sponsoring agency.

HEALTH CARE SYSTEMS RESEARCH PROGRAM

DEFINITION

A health care system is a network of human and physical resources intended to provide health care to a defined population.

The program is divided into two sub-programs; research, and feasibility studies.

RESEARCH

This program supports evaluative studies in the:

- organization of health systems or programs
- relative effectiveness of services, including new technology and new diagnostic techniques
- determination of optimal quantity and quality of service
- cost-effectiveness of service
- quality of health manpower education programs
- health care or health status of populations by epidemiological surveys
- development of an information system with specific research objectives

FEASIBILITY

Prior to compiling a major research proposal, potential applicants are encouraged to consider the appropriateness of a feasibility study.

Feasibility grants are made to support the testing of particular feature(s) of a research project to demonstrate feasibility, in preparation for the submission of a complete research proposal to the Health Care Systems Research Program. These grants are normally limited to $13,000, for a period of up to 9 months.

An example of the type of activity supported in this sub-program might be the development, validation, and reliability assessment of a measurement instrument.

The expected outcome from this type of support is the submission of a fully developed research proposal to the Health Care Systems Research Program.

Applicants should note that successful completion of a feasibility study does not guarantee approval or funding of the resultant major research proposal.

PUBLIC HEALTH RESEARCH AND DEVELOPMENT PROGRAM

DEFINITION

Within the context of this Program, the practice of public health includes efforts at the community level and involves three broad components:

- prevention, to include health promotion and maintenance
- organization and delivery of health care at the community level to include the assessment of resources in relation to actual and anticipated health needs
- early identification of and bringing to adequate care those in need of health care

The program is divided into four sub-programs: research, formulation of research, information studies, and workshops/ conferences.

RESEARCH

This sub-program supports evaluative studies in the:

- organization of public health services and programs
- relative efficacy and cost-effectiveness of public health services
- prevention, diagnosis and management of public health problems
- the quality of public health manpower education programs
- health care or health status of populations by epidemiological survey
- establishment of an information system with specific research objectives

The development of laboratory techniques, e.g. to identify infectious disease organisms, will only be considered for support if plans are included for application of the technique in an adequate clinical or epidemiological evaluation.

FORMULATION

Formulation grants support the development of research proposals. These grants, normally limited to $13,000, for a period of up to 9 months are made to meet extraordinary costs involved in the formulation of a proposal, and are limited to individuals who do not normally have access to the resources necessary to develop a sound proposal. Eligible costs depend upon individual circumstances. Examples of activities supported in this sub-program may include:

- retrieval and analysis of data which is not immediately available to the sponsoring agency;
- limited travel expenses to visit another program or agency when the equivalent experience cannot be gained through correspondence;
- the assistance of a research methodologist or other health professional;
- demonstration of the feasibility of some feature of the study; for example, the development, validation, and reliability assessment of a measurement instrument.

The expected outcome from this type of support is the submission of a fully developed research proposal under the Public Health Research and Development Program. The applicant is expected to take the major responsibility for developing the proposal. A formulation grant may not be used to purchase a proposal in its entirety.

Applicants should note that the successful completion of a formulation study does not guarantee approval or funding of the resultant major research proposal.

INFORMATION STUDIES

The objective of an information study is to make existing data available in a form useable for planning or project development in a public health service program. Applications should clearly state the proposed uses, methodology to be used and benefits. Support may be provided for the retrieval, completion or analysis of data. Unlike a research project, the results of an information study are not expected to be applicable beyond the program for which the data has been developed. A grant made from this sub-program is normally limited to $13,000 for a period of up to 12 months.

WORKSHOPS/CONFERENCES

This sub-program assists organizations to develop or implement workshops or conferences with the objective of increasing the research skills and understanding of public health personnel. The conference or workshop may be local or provincial in scope. The award is normally limited to $5,000, for a period of one year.

HEALTH CARE RESEARCH UNITS

The Ministry supports Health Care Research Units at the five university Health Science Centres in Ontario. Resources are available at these Units to provide consultation on methodology and analysis and to assist with the preparation of submissions to research grant programs. Willingness to co-operate, on the part of staff at the Units, must be clearly confirmed in correspondence appended to the application.

The names and addresses of the directors of the five Health Care Research Units are:

Dr. I.W. McDowell 737-6451
Director
Health Care Research Unit
Department of Epidemiology
and Community Medicine
University of Ottawa
451 Smyth Road
Ottawa, Ontario K1H 8M5

Dr. R. Steele 547-6685
Director
Health Care Research Unit
Queen's University
25 Union Street
Kingston, Ontario K7L 2N6

Prof. J. Lomas 525-9140 Ext. 2135
Co-Chairman
Regional Service Program
Dept. of Clinical Epidemiology
& Biostatistics
McMaster University Medical Centre
1200 Main Street West, Rm. 2C15
Hamilton, Ontario L8N 3Z5

Dr. R.J. Turner 679-6760
Director
Health Care Research Unit
University of Western Ontario
First Floor, CFC Building
London, Ontario N6A 5B8

Mr. C.A. Voelker 978-6963
Director
Health Care Research Unit
University of Toronto
150 College Street
Toronto, Ontario M5S 1A1

HEART, CANCER, ADDICTION AND MENTAL HEALTH RESEARCH

The Ministry provides financial assistance to the research programs of the heart, cancer, addiction, and mental health foundations.

Investigators in the fields of heart, cancer, addiction or mental health may wish to direct research inquiries to one of the following foundations:

Addiction Research Foundation
33 Russell Street
Toronto, Ontario
M5S 2S1

Heart and Stroke Foundation of Ontario
576 Church Street
Toronto, Ontario
M4Y 2S1

Ontario Cancer Treatment and Research Foundation
7 Overlea Boulevard
Toronto, Ontario
M4H 1A8

Ontario Mental Health Foundation
365 Bloor Street East
Toronto, Ontario
M4W 3L4

RESEARCH GRANTS ADMINISTRATION

SOURCE

Applications may be submitted by individuals or groups of individuals associated with a health agency in Ontario, including universities, hospitals, public health units, community groups or associations, or non-profit organizations. The health agency acts as the sponsor of the project. All grants are made to the sponsor on behalf of the individuals.

SPONSOR

The sponsor assumes responsibility for the accounting and payment of all project expenses and will be reimbursed for actual expenditures within the approved budget.

The sponsor is expected to provide accounting and administrative services, research and office space as well as office furniture, routine secretarial services and equipment. The grant does not include remuneration of the principal investigator or payment of overhead charges. Title to all equipment purchased with project funds will be vested in the sponsoring agency.

In the case of a hospital or other institution which is a teaching unit of a university, the sponsoring agency is normally the university.

DEADLINES

Research applications to the Health Care Systems Research Program, and major proposals and information study applications to the Public Health Research and Development Program must be received by April 1 and November 1 of each year.

Feasibility, formulation, and workshops/conferences applications may be submitted at any time.

PREPARATION FOR APPLICATION

Investigators will find it helpful to study Appendix A (Criteria for Assessment) in order to anticipate the type of questions considered during the review of applications. These criteria are provided to all appraisers of the application.

Applicants needing assistance in preparing a proposal may wish to consult with a Health Care Research Unit (page 8).

When the proposed project requires the support and co-operation of other professionals, departments, health care research units, associations, or health agencies, their willingness to co-operate must be clearly confirmed in correspondence appended to the application. Applicants are advised to seek co-operation before submitting the proposal.

THE APPLICATION

The application consists of the following components in the order listed:

1. Cover form "Application for a Health Research Grant"
2. Animal, human ethics and biosafety certificates
3. Brief description of research in non-technical language (maximum of 300 words)
4. Budget detail - minimum of two fiscal periods
5. Future funding
6. Project proposal, (maximum 20 pages); beginning with a table of contents
7. Resumes (maximum 3 pages each)
8. Appendices (maximum 30 pages in total)

Six copies, including one with original signatures, of the complete application are required for each proposed project, whether it is new or renewal. All pages must be typewritten, double spaced, on A4 metric or 8½ by 11 inch white paper. Applications which are considered difficult to read as a result of photo-reducing, dot-matrix printing etc. may be returned without review. The complete proposal must be contained within the 20 page limit. Pages in excess of the limits stated above may not be considered in the review process.

A detailed description of the components of the application follows:

1. COVER FORM: One copy of the application must have original signatures on both cover form and certificates (discussed below). Sufficient time should be allowed for processing within the applicant's organization to obtain the appropriate authorization in advance of program deadlines. All co-applicants are required to sign.

2. CERTIFICATES:

   (a) Certificate - Ethics in Human Experimentation: Grant applications for projects which involve the use of human subjects or human material, the collection of survey data through application of a survey instrument directly to human subjects, or the collection of data contained in confidential records, will not be accepted unless accompanied by a certificate from the sponsor's review committee giving a recent assessment of the study's current acceptability on ethical grounds (page two of application form).

In universities, the review is normally carried out by an internal standing committee. Members of the review committee must abstain if their proposal is being considered.

In other agencies, a committee can be formed for this purpose. Such specially-formed committees cannot have, as members, the applicant(s), consultants or individuals otherwise involved with the project.

The ethical review committee should consist of at least one representative appointed by the president or the agency's administration officer; two individuals (not associated with the proposed project) with knowledge of the potential benefits and risks in the area of the proposed research, and one or more lay individuals who will represent a general point of view. Issues of concern to the ethical review committee will include the rights of individuals, informed consent, deception, privacy, confidentiality, necessity of the research, risk and benefit, and monitoring of intervention effects.

The ethical review committee will report on the form provided, signed by the research administration officer, or other authorized official, indicating the composition of the committee, and stating its opinion on the ethics of the protocol, including any conditions imposed.

If the committee finds the proposed project unacceptable, the application for a grant should not be forwarded.

If the research protocol changes during the term of the grant, it is the responsibility of the applicant to initiate a review and submit a new ethics certificate to the Ministry.

(b) Certificate - Animal Experimentation: Grant applications which involve research on animals must be accompanied by the appropriate form signed by the chairman of the animal care committee and the research administration officer. This form indicates that the research will be carried out in accordance with the principles set out by the Canadian Council on Animal Care and its publication "Canadian Council on Animal Care, Guide to the Care and Use of Experimental Animals". Animal research must be conducted in facilities currently registered under the Animals for Research Act (Ontario 1980).

(c) Certificate - Biosafety: Proposed projects which involve the use of potentially biohazardous agents, identified in the report (and revisions) of the Medical Research Council on the "Guidelines for the Handling of Recombinant DNA Molecules, and Animal Viruses and Cells", are to be reviewed by the sponsor's biohazards committee. The certificate

identifies the nature of the potential biohazard and the level of containment needed. The chairman of the biohazards committee, by signing the certificate confirms that the physical facilities, and laboratory and emergency procedures consistent with the containment level, do exist and are in operation.

3. BRIEF DESCRIPTION OF RESEARCH: The description is to be 300 words or less in a language suitable for communication with the general public. If funding is approved, this description may be used in media releases, newsletters or reports. Include a brief outline of the objectives of the proposed research, method of investigation and the results expected. If the description is considered to be overly technical, the principal investigator may be asked to re-draft it.

4. BUDGET DETAIL: A sample presentation of budget detail can be found in Appendix B. The budget is to detail, for the next two fiscal periods, the estimated cost of the project in constant dollars. Annual increments or escalation factors are not to be incorporated into the second fiscal period amounts. The fiscal periods or portions thereof must coincide with the government's fiscal year which runs from April 1 to March 31. Separate amounts are to be shown for project requirements within the following categories:

- Personal Services - salaries or fees for professional assistants, graduate students, technicians, consultants, and other necessary support personnel and employer's contribution to fringe benefits must be identified separately for each individual within this category. Indicate annual rates and time commitment to the project for all personnel. Salary requests should parallel those paid to similarly classified persons within the sponsoring agency or community. Principal investigators are not eligible for salary support from the project. Personnel paid from the Ministry's grants are not employees of the Ministry.

- Travel - funds essential for the collection of data or transportation of subjects or other field work travel. In addition, separate funds for travel either to centres doing similar work for the purpose of obtaining first-hand essential information, or to scientific meetings for the presentation of project-related papers will be considered if details are provided. The amount allowed for travel to meetings may be limited according to current guidelines.

- Equipment - minor items specifically required for the project which do not exceed a total value of $8,000. Requests for office equipment (desks, tape recorders, and calculators, etc.) will not be considered.

Applicants should consider both the purchase and rental alternatives, provide information on the comparative costs, and the reason for their choice. If equipment is to be rented, the cost should appear in the Supplies and Services category.

- Supplies and Services - expendable materials, telephone, postage, purchase and boarding of animals, computer services, printing and photocopying, rental charges, repair costs, or maintenance contracts related to equipment used in the project. Where applicable unit cost, quantity and total cost should be specified for an item.

- Offset Revenue - any other sources of funds and amounts provided for any aspect of the project.

Specify the fiscal period(s). Provide detail for each budget category and justify any costly or unusual items. Inadequate explanations of items in the budget can result in arbitrary decisions on the appropriate level of funding.

5. FUTURE FUNDING: A brief explanation of the need for financial support and how it can be provided after completion of the project for any or all of the following:

- further research arising from this work
- implementation of new procedures or programs
- any continuing service component of the project

Service funding from research grants cannot be provided beyond the termination date of the research project. Once the value of a service is established, implementation is the responsibility of the investigator and the sponsoring agency.

6. PROPOSAL: The detailed proposal must not exceed 20 double- spaced typewritten pages A4 metric or 8½ by 11 inch white paper and is to include:

- objectives of the research and the underlying hypotheses;

- present state of knowledge relative to proposed research and relevant work done by the applicant, including references to significant publications;

- research design including a time-chart for major activities, methodologies, analysis of results, criteria for evaluating outcome;

- economic analysis of cost-effectiveness, cost-benefit, or cost-utility, if pertinent;

- relevance of the proposal to health problems in the province and benefits expected.

7. RESUMES: Include for each applicant, consultant and any senior personnel employed on the project a 3-page resume. Excess pages will not be considered in the review process.

8. APPENDICES: Include supporting documents such as letters from consultants, other departments, health care research units, associations, or service agencies whose co-operation is necessary to conduct the project. The nature and extent of their commitment must be clearly described.

   Other relevant appendices may be added to the application. They should be distinct from the proposal itself and limited to a total of 30 pages. Excess pages will not be considered in the review process. Attempts should be made to present all information of major relevance to the project in the 20 page proposal.

CONTINUATIONS

Application to continue beyond the end of the first fiscal year of a project originally approved-in-principle for 2 fiscal periods is made by submitting a letter confirming continuation of the project by December 15 of the first fiscal year. If changes to the project for the second fiscal year are anticipated, a revised budget detail and explanation may be submitted. Otherwise funding will be considered at the level originally approved-in-principle.

RENEWALS

To apply for funding beyond the first approval, it is necessary to complete an application as described previously. However, in place of the detailed proposal, a summary of the project and complete progress report (maximum 20 pages) is included. A progress report is to demonstrate that headway has been made towards achieving the objectives of the proposal. Include, for example, details on:

- advancement in the development of instruments
- status of data collection, and subject entry
- findings to date
- modifications to original work plan, timetable, or budget

Copies of reprints and manuscripts arising from the project may be included as appendices (maximum 30 pages).

INFORMATION STUDIES

Applications are to include all details previously outlined in sections 1 to 8.

FEASIBILITY AND FORMULATION GRANTS

Applications to this sub-program are for funds to support the development of a complete research proposal. The application covering form, certificates, brief description, budget detail, supporting documents, resumes, and appendices should all relate to the specific tasks to be carried out in order to achieve this purpose. The detailed proposal should include the objectives, background work, relevance, and methodology and analysis details, as far as they are known, for the major proposal. Some aspects of the major proposal will, of course, be incomplete. These features should be highlighted as the objectives to be addressed by the feasibility/formulation proposal. Methodology and analysis details for the tasks to be undertaken to address these objectives should be included. Criteria of successful outcome are to be explicitly stated, so that there is a basis for judging whether feasibility has been demonstrated, and that a major proposal can be constructed in complete form.

WORKSHOPS/CONFERENCES

An application to this sub-program consists of the covering form, budget detail, and a description of the workshop which includes information about the objectives, format, target population, expected attendance, method of evaluation, and other sponsors or major contributors.

REVIEW PROCESS

Applications to Ministry research grant programs are subjected to peer review by the standing program committees. An application is first considered by Ministry officials and the committee chairmen to determine eligibility within the terms of reference of the various programs. If acceptable, it is assigned to the appropriate program and review committee.

The review committees comprise health professionals from outside government. They are selected for their expertise in research methodology as well as knowledge in a clinical field or areas such as economics, biostatistics, computer sciences, or epidemiology.

Applications are sent for confidential written evaluation to other external experts who are knowledgeable in research methodology or in a field relevant to the particular proposal. Applicants may submit in a covering letter with their proposals, the names of up to three knowledgeable individuals who do not have a conflict of interest with the proposal, who may be invited to submit evaluations.

The review committee may seek, by letter or personal interview, clarification from the applicants on specific aspects of the proposal.

When a proposal relates to an existing government program, it is reviewed internally by the responsible area to assess program and policy implications.

With the assistance of the external appraisals, internal reviews, and information from interviews and written responses, individual committee members arrive at their own conclusion about an application. In a meeting of the full committee, the applications are discussed and debated. The applications are considered with regard to scientific merit and relevance to health priorities.

Applications which are found to have merit both in science and relevance are rated by each committee member. The ratings are averaged and those which achieve a passing score are recommended to the Ministry for support. The Committee may recommend support, in full or in part. The initial recommendation on new applications may span up to two (government) fiscal periods. Any continuance of support beyond the initial recommendation is subject to annual review of progress through a renewal application.

Copies of written reports on proposals are provided to applicants at the end of the competition when the results are announced. The review committee's discussion is not recorded in these reports.

NOTIFICATION OF AWARDS

A formal letter of award is sent at the beginning of each fiscal period to the investigator with a copy to the designated official of the sponsoring agency. The letter provides authority to incur project expenses for items and amounts specified in the approved budget detail. Any commitments made in excess of the approved budget are not the responsibility of the Ministry. The notification is valid only for the period specified. Any unclaimed funds at the end of the fiscal period revert to the Treasury of Ontario.

AMENDMENTS

The grantee is expected to consult with the Ministry before any major alteration in the project is implemented.

All expenditures on the project must be consistent with the approved budget detail. Funds may be transferred between the two budget categories personal services, and supplies and services, as long as the total adjustment over the period of the award does not exceed $1,000. All other deviations from the budget require formal amendment. Requests for amendments must be made in writing, and approved by the Ministry, before the related expenses are incurred. Final requests for adjustments are to be made prior to March 1.

If the grant holder is to be absent for a significant length of time during the award, for sabbatical or study leave, for example, alternative arrangements for responsible supervision of the project must be submitted for Ministry approval prior to the absence.

METHOD OF PAYMENT AND CLAIMS

During the fiscal period, a cash flow of up to 80 per cent of the award will be provided to the sponsoring agency. Claims detailing the actual expenditures must be submitted quarterly, and signed by the designated financial officer of the sponsoring agency.

As all expenditures are subject to provincial audit, sponsors are required to maintain adequate accounting records. Claims must be based on actual expenditures, not purchase orders or commitments. Final claims must cover goods or services received before March 31 and must be submitted by April 7, if not stated otherwise. Investigators are advised to check with their sponsors who may have an earlier internal deadline for submitting claims.

Funds unclaimed at the end of each fiscal year revert to the Ontario Treasury.

All claims and related inquiries should be directed to:

Payments Supervisor
Finance and Accounting Branch
Ministry of Health
3rd Floor, 15 Overlea Blvd.
Toronto, Ontario M4H 1A9

Based on funds claimed during the first months of the award period, the Ministry retains the right to initiate a budget reduction, in consultation with the investigator, on projects for which funds claimed are significantly below the level of disbursements as indicated in the approved budget.

FINAL REPORTS

Six copies of a final report are to be submitted no later than six months after termination of funding by the Ministry. As part of the ongoing evaluation of programs supported through the Ministry, final reports are subjected to review by the committee which recommended support of the project.

Major Research Proposal:

A final report consists of not more than 20 pages and should contain:

- a comprehensive summary of the objectives, procedures and methods of the research;
- a clear statement of the findings obtained together with supporting data;
- conclusions and discussion of applications of the new findings;
- plans for publication and dissemination of results to other health care professionals and organizations.

Reprints of publications and copies of addresses given at scientific meetings may be attached as appendices.

Investigators may refer to the "Guide for Evaluation of Final Reports" (Appendix C) for examples of the types of questions considered during committee review of the report.

Feasibility/Formulation Proposals:

The final report for a formulation/feasibility study will depend on the success of that study. If the study is successful, a fully developed research proposal to the major grant program is acceptable as the final report of the formulation/feasibility study. If results indicate that it is not feasible to pursue the research, then a final report is required which clearly outlines the reasons for such a conclusion, and gives suggestions for new approaches to the problem.

Information Studies:

A final report is required following the guidelines for major research proposals as given earlier.

Workshops/Conferences:

A final report summarizes the proceedings of the workshop or conference, and may include program content, attendance record, participants' evaluations, conclusions, and an assessment of attainment of goals.

PUBLICATIONS

The research findings are the property of the investigators and the sponsoring agencies. Principal investigators are encouraged to make their findings available to individuals and groups which may benefit from the research. The Ministry, and the specific research program should be acknowledged as a source of financial support.

Research Awards

AMENDMENTS

During the tenure of the award, the Ministry of Health should be consulted about any substantial modifications to the approved program eg. time commitment to research, teaching and service; change in supervisor or department/ program affiliation; maternity leave.

RESEARCH AWARDS DESCRIPTION

HEALTH RESEARCH PERSONNEL DEVELOPMENT

The intent of this program is to provide career stability for a cadre of new clinical and community health researchers, to meet expected manpower needs in the next ten years.

Awards will be made to Ontario universities to provide personal support to individuals engaged in health research programs, either as trainees at the graduate student (Student Award) or post-doctoral level (Fellowship), or as independent investigators (Career Scientists). The research programs may be located at the university itself, or at its affiliated teaching hospitals or associated research institutes.

Applications are submitted by Ontario universities for research programs in clinical or community health fields, which are defined as:

Clinical - involved directly in patient care; for example: medicine, dentistry, nursing, clinical psychology or pharmacy.

Community Health - involved in fields related to the execution of studies of groups of individuals in the community, or to the development of methodologies appropriate to such studies.

The skills and methodology of epidemiology, health economics, health administration or biostatistics may be applicable in either field.

While it is expected that the research plans of most candidates for these awards would involve human subjects directly, in some circumstances, the proposed research may not involve humans in its early stages, but would clearly do so in a few years time.

Appendices

STUDENT AWARD

PURPOSE

To provide support to outstanding individuals undergoing research training in a doctoral or master's degree program, relevant to career development in clinical or community health research.

ELIGIBILITY REQUIREMENTS

Applications are made by Ontario universities on behalf of individuals seeking research training in a graduate program located in the university, or in special cases, at another location. The degree program in which the applicant is to be registered must be a recognized graduate program, which has been in existence for at least two years, in health sciences or other relevant programs such as economics, statistics or administration. The program must have as its prime purpose the imparting of research skills directly relevant to clinical or community health areas. The program must involve a research thesis. These awards are not available for individuals in programs restricted to advanced clinical training for health professionals.

The candidate must:

- gain acceptance to a suitable program;
- exhibit interest in, and potential for, a health research career in Ontario;
- commit his/her time fully to graduate studies and related activities;
- not concurrently hold another major personal support award;
- be a Canadian citizen or landed immigrant at the time of taking up the award.

THE APPLICATION

The application consists of the following components in the order listed:

1. Cover Sheet
2. Student Program
3. Letters of Recommendation

Forms for items 1 and 2 are included in the "Application for a Health Research Personnel Award - Student Award". Six copies of the completed application are required, including one with original signatures. All pages must be typewritten.

A detailed description of the components of the application follows:

1. Cover Sheet: The form should be filled out completely. One copy of the application must have original signatures on the cover sheet. Sufficient time should be allowed for processing within the university to obtain the appropriate authorization in advance of the application's deadline.

   Note: Preference will be given to programs at Ontario Universities. If the program is at another location, the sponsoring Ontario university must attach a letter in support of the applicant and the program, and document willingness to administer the award on behalf of the candidate.

2. Student Program: All questions should be completed. The summary description of the program should be 150 words or less, and should be in a language suitable for communication to the general public as it may be used in media releases, newsletters or reports if an award is made and accepted.

   The candidate's resume and transcripts from all academic work should be attached to this form.

   The supervisor's resume is required for doctoral students, and should also be attached if the supervisor for a master's student is known.

   A letter of acceptance to the program is to be submitted when available.

3. Letters of Recommendation: All candidates are to arrange to have two letters of recommendation submitted directly to Grants Administration from supervisors familiar with the candidate's work.

A maximum of five pages of other relevant material or documentation which would support the candidate's application may be appended. Attachments exceeding the stated limit may not be reviewed.

REVIEW CRITERIA AND PROCESS

Applications will be submitted for review by a provincial committee. The review criteria will include:

- individual's academic background;
- quality of degree program including graduate supervision;
- potential of this applicant.

Overall excellence of the candidate and his/her chosen program is the primary selection criterion.

To facilitate review, the Review Committee may request an interview or site-visit.

AMOUNT AND DURATION OF SUPPORT

The amount of the award will be based on the candidate's qualifications and experience relative to the provincial Student Award scale.

An award may be approved-in-principle for the duration of the degree program, up to a maximum of four years for a doctoral student, and two years for a master's student, subject to evidence of satisfactory progress.

REPORTS

An annual letter of progress is to be submitted by the student by May 15. Transcripts of courses completed should be attached, and the supervisor's evaluation, giving evidence of the candidate's good standing in the program.

A final report is to be submitted within 90 days after completion of the Student Award, summarizing accomplishments during the tenure of the award and providing a detailed description of career plans.

FELLOWSHIP

PURPOSE

To provide outstanding individuals with the opportunity to gain experience in research methods applicable to clinical or community health research, prior to research career appointments.

ELIGIBILITY REQUIREMENTS

Applications are made by Ontario universities, on behalf of individuals seeking experience in a research program located in the university, one of its affiliated teaching hospitals or associated research institutes or, in special circumstances, at another location.

The candidate must:

- have completed a Ph.D., or have suitable experience following completion of a medical/dental degree or a graduate degree in another health profession;
- have demonstrated a potential for and personal commitment to a career in health research in Ontario;
- ensure that all necessary authorizations from his/her supervisor and department/faculty have been arranged;
- commit his/her time fully to research training and related activities;
- not concurrently hold another major personal support award;
- not concurrently hold a faculty position;
- be a Canadian citizen or landed immigrant at the time of taking up the award.

THE APPLICATION

The application consists of the following components in the order listed:

1. Cover sheet
2. Candidate's background
3. Candidate's statement
4. University's statement
5. Letters of recommendation

Forms for items 1 through 4 are included in the "Application for a Health Research Personnel Award-Fellowship".

Six copies of the complete application are required, including one with original signatures. All pages must be typewritten.

A detailed description of the components of the application follows.

1. Cover Sheet: The form should be filled out completely. One copy of the application must have original signatures on the cover sheet. Sufficient time should be allowed for processing within the university to obtain the appropriate authorization in advance of the application's deadline.

2. Candidate's Background: All questions should be completed. The 'Short Title' should be in language suitable for communication to the general public as it may be used in media releases, newsletters or reports if an award is made and accepted. The summary description of the fellowship program should be 100 words or less.

   The candidate's resume and transcripts from all academic work should be attached to this form. The resume should be current and give details of employment, education, clinical training, appointments, research experience, publications and presentations, and sources and amounts of grants and awards received.

3. Candidate's Statement (maximum 5 single-spaced pages): This includes in his/her own words:

   - details of current status, describing responsibilities of present position and program, and information about research abilities, including projects for which grants have been received (or applied for);

   - a clear description of the type of training sought and its relationship to future career goals;

   - if the location of the program is not at the sponsoring university, why was the location chosen.

4. University's Statement: This section is to be completed by the program/department chairman at the sponsoring university. It is to include an evaluation of the candidate and the university's rationale for nominating the candidate and address the following points:

   - candidate's past performance;

   - proposed training of the candidate during this fellowship program and its relevance to the university's research priorities;

- a description of the environment of the fellowship program including opportunities to engage in research and resources and facilities available;

- candidate's potential for independent research and candidate's expected contribution to the university's research program after completion of the fellowship program.

The resume of the candidate's fellowship supervisor should be attached to this statement.

If the site of the fellowship is not the sponsoring university, a letter of acceptance from the training program should be attached. In this case, the resume to be attached is that of the fellowship supervisor at the training site.

5. Letters of Recommendation: All candidates are to arrange to have two letters of recommendation from supervisors or associates familiar with the candidate's work submitted directly to Grants Administration (address page iii).

A maximum of 15 pages of other relevant material or documentation which would support the candidate's application may be appended. Attachments exceeding the stated limit may not be reviewed.

REVIEW CRITERIA AND PROCESS

Applications will be submitted for peer review by a provincial committee. The review criteria will include:

- individual's academic and research background;

- research environment where the applicant proposes to work;

- supervisor's research record;

- quality of research program and its consistency with stated career goals;

- potential of the research training program and this applicant.

Overall excellence is the primary selection criterion, but where two candidates are judged equal, the relative numbers in clinical and community health areas may become a decisive factor.

To facilitate review, the Review Committee may request an interview or site-visit.

AMOUNT AND DURATION OF SUPPORT

The amount of the award will be based on the candidate's qualifications and experience relative to the provincial Fellowships scale. An initial award may be approved-in-principle for up to 2 years, the minimum being 1 year.

REPORTS

A brief progress report is to be submitted by the University by April 1 of the first year of a 2-year award, describing the Fellow's progress to date and indicating any modifications in his/her program for the second year. The report should list presentations and publications, courses taken and completed, consultations to other projects, meetings attended, and any program modifications. The supervisor's evaluation of the Fellow's progress and any changes to the program is to be included.

A final report is to be submitted by the Fellow within 90 days after completion of the fellowship, summarizing accomplishments during the tenure of the award and providing a detailed description of career plans.

RENEWAL APPLICATION

A third year of support may be awarded under exceptional circumstances. This would require submission of a complete renewal application, a major progress report, and detailed justification of the special circumstances underlying the request.

PUBLICATIONS

Any publications submitted during the tenure of the fellowship are to acknowledge the award by identifying the author as a Fellow of the Ontario Ministry of Health, Health Research Personnel Development Program.

CAREER SCIENTIST

PURPOSE

To provide support to outstanding candidates, who have demonstrated potential, to carry out independent research in a clinical or community health field.

ELIGIBILITY REQUIREMENTS

Ontario universities may submit applications on behalf of individuals meeting the following requirements.

The candidate:

- would, as a minimal requirement, have completed a two-year post-doctoral training program or have equivalent experience;
- would have a maximum of two years of independent research experience at the time of taking up the award;
- must commit at least 75 per cent of his/her time to relevant research activities;
- must carry out his/her research either at the university, or one of its affiliated teaching hospitals or associated research institutes;
- cannot concurrently hold another major personal support award;
- cannot, at the time of application, hold an established faculty position supported from the regular operating funds of the university, institute or hospital;
- must be legally entitled to employment in Canada at the time of taking up the award.

To maintain eligibility beyond the second year, the candidate must hold, as a principal investigator, a grant-in -aid won in an extramural grants competition.

THE APPLICATION

The application consists of the following components in the order listed:

1. Cover sheet
2. Candidate's statement
3. University's statement
4. Letters of recommendation

Forms for items 1 through 3 are included in the "Application for a Health Research Personnel Award-Career Scientist."

Six copies of the complete application are required, including one with original signatures. All pages must be typewritten.

A detailed description of the components of the application follows:

1. Cover Sheet: The form should be filled out completely. One copy of the application must have original signatures on the cover sheet. Sufficient time should be allowed for processing within the university to obtain the appropriate authorization in advance of the application's deadline.

2. Candidate's Statement (maximum 10 single-spaced pages): This should include in his/her own words:

   - description of current status detailing research, teaching (including graduate student supervision), and service activities and indicating time spent and level of involvement;

   - a description of the current research proposal, or protocols for which the candidate has received (or applied for) grants, as a principal investigator, and a five year outline of research direction and intentions. If this includes collaborative research with other health disciplines, then explicit details should be provided of the specific contribution of the candidate to a team effort;

   The candidate's resume should be attached to this form. The resume is to be current and give details of employment, education, clinical training, appointments, research experience, awards and grants received, and a list of publications and presentations.

3. University's Statement: This section is to be completed by the program/department chairman of the sponsoring university. It is to include an evaluation of the candidate and the university's rationale for nominating this candidate, and address the following points:

   - candidate's past performance;

   - department/program and university need for the individual candidate in relation to current and future research plans and priorities;

- the potential research environment for the candidate, including a description of the department/program, current faculty and health research resources and facilities available.

4. Letters of Recommendation: All candidates are to arrange to have two letters of recommendation from supervisors or associates familiar with the candidate's work submitted directly to Grants Administration (address page iii).

A maximum of 15 pages of other relevant material or documentation which would support the candidate's application may be appended. Attachments exceeding the stated limit may not be reviewed.

REVIEW CRITERIA AND PROCESS

The mechanism is a peer review of individual applications by a provincial committee. Overall excellence is the primary selection criterion, but where two candidates are judged equal, the relative numbers in clinical and community health may become a decisive factor.

The review criteria will include:

- individual's academic and research background, including qualifications and previous performance;
- research environment where the applicant proposes to work;
- quality of proposed research;
- career potential of the applicant.

Applications are sent for confidential written evaluation to other external experts who are knowledgeable in the applicant's field of research interest. Copies of these reviews are available to the applicant upon written request.

To facilitate review, the Review Committee may request an interview or a site-visit.

AMOUNT AND DURATION OF SUPPORT

Support will be approved-in-principle for an initial period of up to five years. It is renewable once for up to five years. The amount of the award will be based on the candidate's qualifications and experience relative to the provincial Career Scientist scale.

A research allowance may be granted in the first year if the successful Career Scientist candidate does not hold an extramural grant-in-aid at that time.

REPORTS

Annual progress reports are required for each award year ending on June 30. These reports are to be submitted by the university by August 31, and should contain a full description, for the year, of the candidate's research accomplishments, including extra-mural grants held, and indicate teaching, and service activities. The candidate's up-to-date resume is to be attached.

A final report is to be submitted within 90 days after completion of the award, summarizing accomplishments during the tenure of the award and providing a detailed description of career plans.

RENEWAL APPLICATION

To apply for funding beyond the first five-year approval, it is necessary to complete a full application, as previously described, by August 1, following completion of the fourth year of the award. This should include a major progress report and a current assessment by the department/program chairman.

PUBLICATIONS

Any publications submitted during the tenure of the Career Scientist award are to acknowledge the award by identifying the author as a Career Scientist of the Ontario Ministry of Health, Health Research Personnel Development Program.

RESEARCH AWARDS ADMINISTRATION

DEADLINE

The closing date for receipt of new applications to the Student Award sub-program is normally January 15. The closing date for receipt of new applications to the Fellowship and Career Scientist subprograms is normally November 15. Applicants should contact the Ministry in the fall to confirm submission deadlines.

NOTIFICATION OF AWARDS

A letter giving formal notification of award is sent to the successful candidate with a copy to the designated official of the university.

METHOD OF PAYMENT AND CLAIMS

The award is effective July 1 for a 12-month period. Awards commencing after July 1 will be prorated. The Ministry of Health will issue quarterly advance payments to the sponsoring agency. Statements detailing actual expenditures must be submitted within 15 days following the end of each quarter, and be signed by the designated financial officer of the university.

As all expenditures are subject to provincial audit, universities are required to maintain adequate accounting records.

Claims must be based on actual expenditures, not commitments. Expenditures may not exceed the award.

Unexpended monies may not be held over for expenditure in subsequent years. Any adjustments required due to underexpenditures during the year of the award will be made in a subsequent payment. All claim-related enquiries are to be directed to:

Supervisor, Grants Administration
Policy Analysis and Research Branch
Ministry of Health
8th Floor, Hepburn Block
Queen's Park
Toronto, Ontario
M7A 1R3
Telephone: (416) 965-5887

APPENDIX A - CRITERIA FOR ASSESSMENT

The following format and questions are provided as a guideline to committee reviewers and external appraisers.

NEW APPLICATIONS

Project Assessment

Discuss the strengths and weaknesses of the proposal in regard to:

- statement of objectives
- the awareness of other work done in this area
- adequacy and appropriateness of the experimental design
- methods of data collection/analysis
- evaluation of results
- feasibility of accomplishing stated aims

Project Resources

(a) Human: Are the training and accomplishments of the investigators suitable as they relate to the proposed study? Has the applicant identified sufficient and appropriate personnel to carry out the study? Has the applicant documented evidence of support from consultants, or agencies whose co-operation or participation is required in the study?

(b) Physical: Are the physical facilities, clinics, laboratories, computing support, etc. adequate to carry out the study? Is there an adequate source of subjects and supplies?

Economic Aspects

Is the proposal likely to have an important economic impact in reducing the costs or increasing the efficiency of health services? Has the applicant provided, where appropriate, an adequate cost-effectiveness, cost benefit or cost-utility analysis?

Budget

Is the budget realistic in terms of the aims of the proposal? Are all items justified on the basis of the procedures and methodology to be used. Has the applicant taken into account other possible income? Has the applicant indicated possible sources for support of any service portion of the project after completion of the research phase?

Relevance

Provide your personal judgement on the relevance of the health problem addressed by this project and the advancement which this project is likely to provide. Comment on the immediacy with which results may be applied in human health care and the potential client population for new developments or services.

Recommendations

Recommend on the disposition of the proposal, that is, approval, rejection, partial or conditional support, or resubmission.

RENEWAL APPLICATIONS

Applications for renewal of support for projects previously funded will be accompanied by a summary of the project and a progress report on the work accomplished to date of submission.

Please use the project summary, the progress report, and the following criteria to assess the successful management of the project:

- have the original aims and methods been modified?
- has the applicant adhered to the original timetable?
- does it seem likely that the project will be completed on schedule?
- is adequate justification provided for departures from the original aims, methods and/or timetable?
- are revised budget and staffing details justified?

APPENDIX B - SAMPLE BUDGET

Budget detail must be specified for two fiscal periods. The fiscal periods must coincide with the government's fiscal year (April 1 to March 31) or portion thereof. Annual increments or escalation factors are not to be included.

FISCAL PERIOD: September 1 to March 31

Personal Services

	Annual Rate	Mos.	% Time	$
Principal Investigator	-	7	20	NIL
Co-Investigators	-	7	5	NIL
Professional assistant	$	7	100	$
Research trainee		5	50	
Summer student		4	100	
Technician		7	75	
Consultant fee				
Other personnel				
Employer contribution to fringe benefits (specify the percentage contribution to fringe benefits for each employee)				

Sub-Total $

Travel

Field work travel including subject travel	$
Visits to other centres doing similar work	
Travel expenses for visiting consultants	

Sub-Total $

Equipment

List items of equipment identifying individual amounts.

$

Sub-Total $

Supplies and Services

Laboratory supplies (no. of units and unit cost)
Telephone (installation and/or service charges)
Postage
Equipment rental (give details)
Fees for photocopying or duplicating
Fees for computer time (quote hourly rate and number of hours)
Fees for keypunching and verifying
Fees for equipment maintenance or repairs
Reprints

Sub-Total	$
Total	$
Less other revenue (identify sources)	$
Net cost	$

BUDGET JUSTIFICATION: To avoid arbitrary decisions on the appropriate level of funding explanations of items in the budget must be provided.

Personal Services

For each position a brief job description should be given to account for the qualifications and skills specified and to justify the level of funding. Workload should be estimated to justify the amount of time employed on the project.

Travel

Average cost per trip and number of trips should be estimated and explained for field work travel. Details of visits to conferences and other centres should be provided. Travel expenses for visiting consultants should be separated into airfare, taxi, meals, and hotel costs.

Equipment

Quotes from suppliers should be provided, and the comparative cost of rental included.

Supplies and Services

Wherever appropriate, number of units and unit costs should be explained. Quotes from the supplier should be provided for purchased services eg. computing, equipment repair.

APPENDIX C - GUIDE FOR EVALUATION OF FINAL REPORTS

The evaluation of final reports by reviewers should include the following:

1. Brief description of the project

2. *Assessment of study outcome:*

   - To what extent were the objectives fulfilled?
   - Are the conclusions valid? If not, why not?
   - To what extent did the project contribute to the knowledge of health care?
   - Do the results obtained justify the funds expended?

3. Dissemination of results:

   - What are the investigator's plans for publication and dissemination of results to other health care professionals and organizations?
   - To what extent are the results likely to be used elsewhere?

4. Conclusions:

   - Is the final report acceptable?
   - Can the data be further analyzed to provide additional information?
   - Is there need for further study in this area?
   - Is further dissemination of the results recommended?